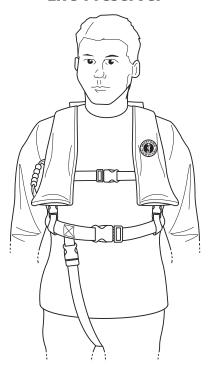


## **Owner's Manual**

### MD3090 and MD3095 Compact Tactical Life Preserver



\*Shown with the MA3090 Chest Belt/Crotch Strap Assembly

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#### DO NOT REMOVE PRIOR TO SALE.

#### **DESCRIPTION**

The Mustang Survival MD3090 and MD3095 are compact life preservers (LP) that have been designed specifically for easy integration with body armor and tactical vests that use a MOLLE (Modular Lightweight Load-carrying Equipment) webbing system. The compact design provides body armor wearers with flotation capability with minimal bulk or interference.

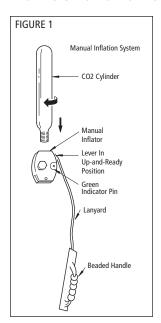
In-water performance tests with the life preserver attached to a typical body armor vest successfully demonstrated the ability of the LP to self-right and float the wearer. It is always recommended that users perform their own in-water test with full gear.

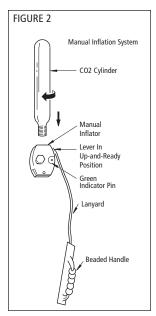
The Mustang Survival MD3090 and MSD3095 can be attached to a body armor vest or worn as a stand-alone life preserver using the chest belt/crotch strap assembly MA3090.

The MD3090 and MD3095 will not inflate automatically upon immersion.

The beaded handle must be pulled to activate inflation mechanism. When worn, used, and serviced according to this owner's manual, this life preserver can greatly increase your chances of survival in the water. The MD3090 easily integrates with body armor that uses a MOLLE webbing system (P. 12) and provides flotation capability.

#### INSTRUCTIONS FOR USE





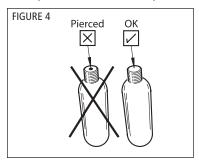
#### Check Your MD3090 or MD3095 Before Using It

After purchasing your MD3090, make sure it has an unused 33 gram CO<sub>2</sub> cylinder attached to the inflator mechanism (Fig. 1). Check the components and how to assemble the inflator by following these steps:

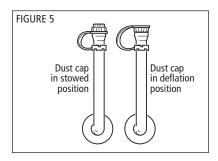
 Undo the Velcro<sup>™</sup> tabs on the wearer's right-hand side of the collar to expose the inflator (Fig. 3).



2) Unscrew and remove the CO<sub>2</sub> gas cylinder from the inflator and inspect its small end. If it is pierced, replace it (Fig. 4)!



- Make sure the manual lever is in the up-and-ready position and insert the green indicator pin if not already in place. Ensure the CO<sub>2</sub> cylinder is screwed hand tight into the inflator.
- 4) Undo the Velcro<sup>™</sup> tabs on the wearer's left-hand side of the collar to expose the oral inflator. Check that the oral-inflation dust cap is properly in the stowed position (Fig. 5).



 Reposition the inflator's protective cover and repack (P. 7). If everything checks out according to the preceding instructions, your LP is ready for use.

#### Sizing and Fit

The LP provides 33.7 lbs of buoyancy and is designed for wearers with a chest range of 30-52 inches weighing over 80 pounds.

#### **Donning Instructions**

It is important that the LP is properly adjusted to fit the person wearing it. An incorrect fit or improper fastening of attachments could impede its effectiveness.

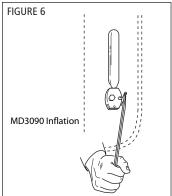
 Belts and straps need to be adjusted for fit. When the MD3090 is integrated with MOLLE body armor vest, ensure the connections are securely fastened (P. 11). When the MD3090 is used with the MA3090 chest belt/crotch strap assembly, the waist belt should fit securely (P. 14).

#### **Inflating Your LP**

It is recommended that the following procedures are used to inflate your MD3090 or MD3095:

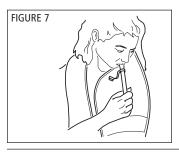
#### 1) Manual inflation

Actuate the inflation system by jerking firmly downward on the beaded handle. The LP should fully inflate within 5 seconds (Fig. 6).



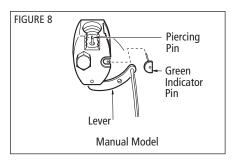
#### 2) Oral inflation

Properly armed and inspected, manual MD3090 LP models will inflate. However, should inflation not occur, or in a nonemergency situation, you can fully inflate the LP by mouth. To orally inflate the LP, first locate the oral inflation tube by opening the wearer 's left front panel of the LP. Then remove the dust cap from the end of the oral tube and blow into the tube until the LP is fully inflated (Fig. 7).



INFORMATION: The carbon dioxide used to inflate LPs will slowly permeate through the fabric cell over time. A slight reduction of pressure will be observed after several hours of inflation. Topping up by oral inflation may be required in the event of prolonged immersion.

#### Re-arming Your MD3090 After Manual Inflation



- Unscrew and inspect the CO<sub>2</sub> cylinder. If used or damaged, discard the CO<sub>2</sub> cylinder (Fig. 4).
- Check the manual lever to ensure it is in the up and ready position with the green indicator pin properly installed. If the green indicator pin is missing or damaged, replace it (Fig. 5).
- Install an unused CO<sub>2</sub> cylinder by screwing it into the top of the inflator and hand-tighten. Do not over-tighten, as this can damage the internal gasket.
- 4) Refold the LP in accordance with the repacking instructions (P. 6). Your MD3090 is now ready for use.

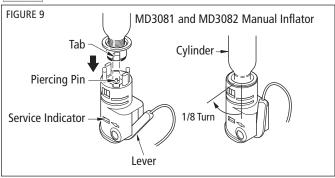
#### Re-arming Your MD3095

#### NOTE: A re-arm kit (MA7203) is required for this procedure.

- Hold the cover in one hand, reach under the cover with the other hand and grasp the plastic housing of the inflator. Pull the inflator toward you, turning the bladder and cover inside out to fully expose the inflator for re-arming.
- If the sensor ring is broken, it has been used or damaged (Fig. 10).
  Discard the used cylinder/bayonet assembly and replace (MA7203).
- Check the new cylinder/bayonet assembly to ensure the o-ring is in place and the sensor ring is intact (Fig. 10). Ensure that the CO<sub>2</sub> cylinder has not been pierced (Fig. 10).
- 4) Raise, and hold, the lever into the inflator housing.
- Install a new cylinder/bayonet assembly by engaging bayonet tabs in housing, pushing in and turning clockwise 1/8 turn to a full stop (Fig. 9).



# WARNING: PFD WILL ONLY INFLATE IF CYLINDER IS TURNED TO A FULL STOP.



6) Examine the service indicator (Fig. 8). Ensure the service indicator is GREEN. If the service indicator is red, the mechanism has been fired or is incorrectly fitted and the inflator requires service. See Re-arming Your MD3095.

NOTE: The service indicator must be green before proceeding.

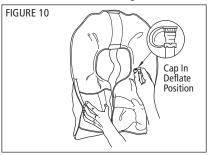
7) Refold the Inflatable PFD in accordance with the Repacking section (p. 12).

YOUR MD3095 IS NOW READY FOR USE

#### **Deflating the LP**

To deflate the life preserver, reverse the oral-inflation tube dust cap and insert it into the valve or depress valve with fingertip (Fig. 5).

The dust cap will not lock in the deflate position so it is necessary to hold it in place (Fig. 5). Gently squeeze the cell until all air or gas has been expelled. Put the inflation tube dust cap back in its normal position on the oral inflation tube (Fig. 5).

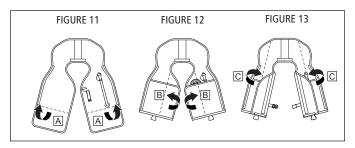


#### Repacking Your MD3090 and MD3095

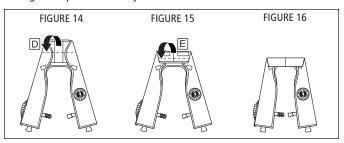
Before repacking, completely deflate the inflation cell. Force excess air out through the inflation tube (Fig. 7). Do not wring cell. Put the inflation tube cap back in the stowed position (Fig. 5).

# NOTE: Before following the repacking sequence, be sure to properly re-arm your MD3090 or MD3095 LP.

- Fold lapels (A) across the front along the dotted line shown in Fig. 11.
- 2) Fold side (B) inward along dotted lines. Secure with Velcro<sup>™</sup> (Fig.12).
- Fold outer lapel (C) and secure Velcro<sup>™</sup> (Fig. 13). Your MD3090 or MD3095 will look as illustrated in Fig. 14.



- 4) Fold flap (D) in half along the dotted line (Fig. 14).
- 5) Fold down the collar (E) along the dotted line and secure with Velcro™ tabs (Fig. 15).
- 6) Ensure the beaded handle is snapped to the outside of the folded LP. Fig. 16 depicts a correctly folded LP.



#### **Usage in Freezing Conditions**

When the temperature is below freezing, a fully discharged cylinder may not adequately inflate your MD3090 or MD3095 LP. Oral inflation may be required to fully inflate the LP in freezing conditions.

WARNING: CO<sub>2</sub> inflation could over-pressurize and damage your LP if already fully orally inflated.

# IS YOUR LP IN GOOD AND SERVICEABLE CONDITION?

Check your LP between outings to be sure that it is properly armed; that it is free of rips, tears or holes; that all seams are securely sewn; and that the fabric, straps and hardware are still strong. Inspect the inflatable

portion of the LP in accordance with the CARE AND MAINTENANCE INSTRUCTIONS.

#### CARE AND MAINTENANCE INSTRUCTIONS

The life preserver and inflation system should be checked at least every three months. In addition, the following maintenance should be performed after each time you wear or inflate the LP.

- 1) Remove and inspect the CO<sub>2</sub> cylinder from the inflator.
- 2) Check all components for dirt or corrosion. Clean or replace.
- Check that the CO<sub>2</sub> cylinder has not been pierced. Replace with MD3090 33gm CO<sub>2</sub> cylinder if necessary (contained in MD3090 accessory pack MA7170). Replace with MD3095 33gm CO<sub>2</sub> cylinder if necessary (contained in MD3095 accessory pack MA7203).
- 4) Check the manual lever to ensure it is in the up and ready position, with the green indicator pin properly installed (MD3090 only).
- 5) To check the oral inflation valve, fully inflate the MD3090 or MD3095 and hold the valve under water. If bubbles appear, deflate and reinflate to test again. Should the leak persist, take your MD3090 or MD3095 to the point of purchase for proper servicing.
- 6) Visually examine your MD3090 or MD3095 for damage or excessive abrasion, wear, tear or contamination. Particular attention must be paid to the stitching. If in doubt, send it to the point of purchase for evaluation and/or servicing.
- Reassemble inflation system parts and repack MD3090 or MD3095 as outlined in previous instructions and illustrations.

Leak test: Every three months the LP should be tested for general leakage by orally inflating until firm and let stand overnight. A leaking LP will not hold its firmness and should be replaced.

WARNING: If you are not confident in the self inspection and servicing of your LP, in accordance with these instructions, take your MD3090 or MD3095 LP to the point of purchase for professional servicing or contact Mustang Survival (see contact information on back of manual).

#### **Safety Accessories**

MA7170 33 gram CO<sub>2</sub> replacement cylinder and green indicator pin.

MA7203 33 gram CO<sub>2</sub> replacement cylinder/bayonet assembly.

MA3090 Chest Belt/Crotch Strap Assembly.

#### **Cleaning and Storing Your LP**

To clean your inflatable LP, remove the CO<sub>2</sub> gas cylinder. Hand wash or sponge down in warm, soapy water and rinse with clean water. Hang to dry on a plastic coat hanger. Be sure to replace CO<sub>2</sub> cylinder. See Rearming Your LP (for your model). Always store your LP in a warm, dry place out of direct sunlight.

### How and Why to Test your LP

Inflate your LP and try it out in the water to:

· Make sure it floats you:

Comfortably (when worn properly)

Adequately for expected operations (Body shapes/densities affect performance)

Make sure it works:

A flow of bubbles should not appear (see CARE AND MAINTENANCE INSTRUCTIONS for leak tests P. 9)

It should inflate quick and easily.

· Learn how it works by:

Activating the CO<sub>2</sub> inflation system Re-arming the CO<sub>2</sub> inflation system Using the oral inflator tube

# How do you Test your LP using the Manual Inflator?

- 1) To test your inflatable LP, you will need:
  - · Your fully armed LP, and

- · Re-arming kit approved for your LP.
- 2) Put on the LP.
- Actuate the inflation system by jerking firmly downward on the beaded handle. The LP should fully inflate within 5 seconds.
- 4) Get into shallow water, just deep enough that you can stand with your head above the surface.
- 5) See if the LP will float you adequately just slightly back of vertical. In a relaxed floating position, verify that your mouth is well above the water's surface. Note the effect of where you hold your legs on how you float.
- 6) Get out of the water and remove the LP. Remove the used CO<sub>2</sub> cylinder from the LP inflator. Completely deflate the LP using the oral inflator.
- Let the LP dry thoroughly. RE-ARM AND REPACK the LP in accordance with the instructions.

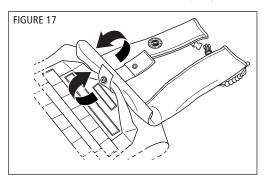
### How do you Test your LP Using the Oral Inflator?

- To test your inflatable LP, you will not need any spare parts, or rearming kits.
- Remove the CO<sub>2</sub> cylinder, to prevent inadvertent activation of the manual inflation system which could potentially damage the LP. Inspect the threaded end to confirm it is unused.
- 3) Put on the LP.
- 4) Get into shallow water, just deep enough that you can stand with your head above the surface.
- 5) If you are a weak swimmer or non-swimmer, inflate the LP partially so that you are supported well enough to be able to complete inflation without touching bottom, either orally or manually. Note this level of inflation because it is the minimum needed for you to safely use this inflatable LP.
- 6) Fully inflate the LP using the oral inflator.
- 7) See if the LP will float you on your back or just slightly back of vertical. In a relaxed floating position, verify that your mouth is well above the water's surface. Note the effect of where you hold your

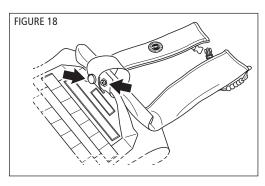
- legs on how you float.
- 8) Get out of the water and remove the LP. Completely deflate the LP using the oral inflator.
- 9) Let the LP dry thoroughly. RE-ARM AND REPACK the LP in accordance with the instructions.

## Integration Instructions with Body Armor

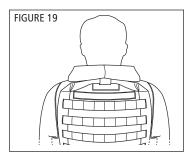
 Lay the body armor vest down on a clean flat surface with the back of the vest facing up. Lift up the emergency extraction strap on the back of the vest and loop the back attachment of the MD3090 Life Preserver around the extraction strap (Fig. 17).



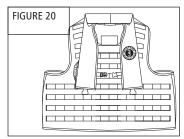
2) Secure the MD3090 back attachment strap with the snap (Fig. 18).



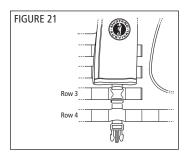
Back view after attachment (Fig. 19).



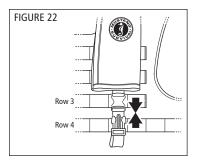
3) Turn the vest, with the attached MD3090 Life Preserver over and lay with the front of the vest facing up. Position the two front lobes of the Life Preserver perpendicular to the webbing running across the vest (Fig. 20).



4) Feed the male buckle through the 3rd and 4th row of webbing, at the second loop from the outside edge. Insert the female buckle through the same place in the 3rd row of webbing (Fig. 21). Ensure the webbing is not twisted.

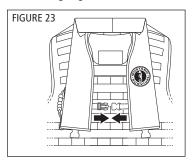


5) Loop the male buckle back over the 4th row of webbing and fasten it to the female buckle. Cinch by pulling down on the loose end of the webbing (Fig. 22). Repeat for the other side.



#### Additional Steps:

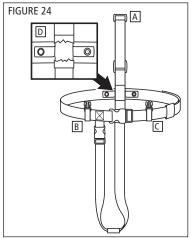
a) Fasten the buckle that connects the left and right lobes in front of the chest section of the vest. Cinch by pulling on the loose end of the webbing (Fig. 23).



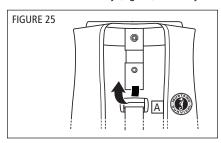
b) Ensure all buckles are securely fastened and webbing adjustments are tight.

## Attachment Instructions for MA3090 Chest Belt/ Crotch Strap Assembly

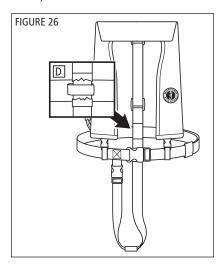
- Layout the MA3090 chest belt/crotch strap assembly as shown (Fig. 24).
  - A. Looploc
  - B. Right male buckle (as worn)
  - C. Left male buckle (as worn)
  - D. T-tab junction with snap (Fig. 24).



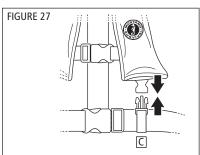
2) Insert the short side of the webbing attachment, on the back of the MD3090 life preserver, through Looploc (A) on back strap of the chest belt accessory (Fig. 25). Securely fasten the snap.



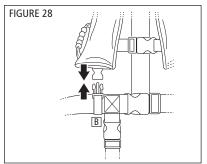
3) Locate T-tab junction at the top of the crotch strap (D) and thread through the lower back chest belt loop. Secure the T-tab with the snap. Once the snap is securely fastened, turn the snapped portion so it is positioned inside the chest belt loop away from the body (Fig. 26).



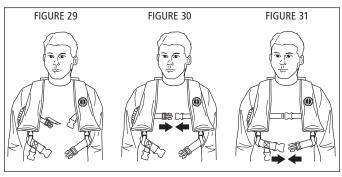
4) Click the male buckle attachment (C) into corresponding female buckle on the front of the chest belt (Fig. 27).



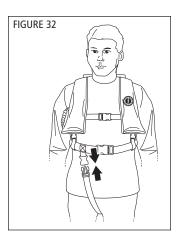
5) Repeat step 4 with buckle attachments (B) for the other side (Fig. 28).



- 6) Unfasten the crotch strap. Put the life preserver on as shown (Fig. 29).
- Buckle chest buckle that connects the right and left lobes of the life preserver (Fig. 30).
- 8) Buckle chest belt (Fig. 31).



9) Bring crotch strap to the front between the legs and securely buckle to chest strap (Fig. 32).





#### **WE SAVE LIVES FOR A LIVING**

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